

On a new Methocid, *Methoca japonica* n. sp.
from Japan (Hymenoptera, Methocidae)

By KEIZO YASUMATSU

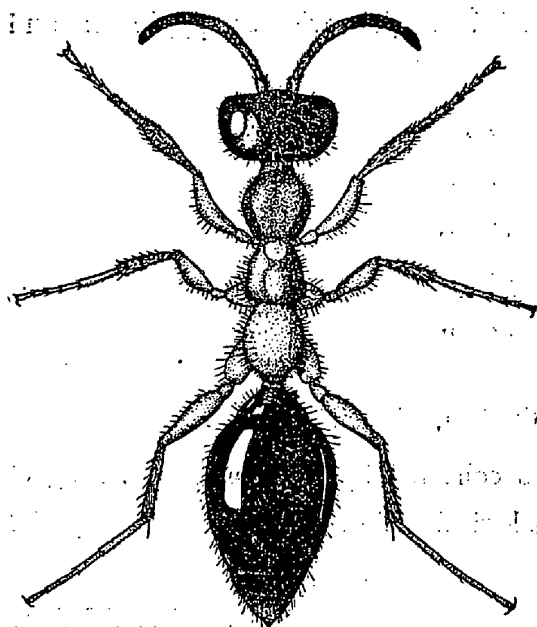
Excepting for the Formosan species, no representative of the genus *Methoca* has yet been described from the Japanese Empire. Although it appears to be one of the rarest genera of Hymenoptera in Japan, it is rather surprising how little attention has ever been paid not only to the Methocidae but also to such families as Mutillidae and Myrmosidae in this country.

In the present paper I describe a new species of *Methoca* found in a collection of Hymenoptera made by Mr. K. Iwata, Osaka, and presented to the Entomological Laboratory of the Kyûshû Imperial University.

Methoca japonica n. sp.

Female. Wingless, black and shining; mandibles, antennae excepting the 6 terminal segments, thorax and legs brownish red; first abdominal tergite partly a little yellowish brown, apex of abdomen yellowish brown; hind margin of 1st, 4th and 5th abdominal tergites presents a similar coloration in certain aspect; body scattered with very short hairs; punctuation sparse and faint; antennae, tibiae and tarsi densely covered with short hairs, those on the coxae comparatively denser; middle and hind tibiae with some short spines, contrary to the fore tibiae.

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*Methoca japonica* n. sp.

Head much wider than thorax and a little wider than abdomen, transverse, much wider than long, very polished and practically impunctate before anterior ocellus; vertex wide and slightly convex; 3 ocelli distinct; eyes large, thinner margins somewhat divergent anteriorly; basal segment of antennae very thick and long, the rest thinner, 2nd segment short; anterior margin of vertex slightly concavely

sinuate between the insertion of antenna and eye on each side; clypeus moderately convex, anterior margin subtruncate and very little emarginate, sparsely haired; there is a very incomplete longitudinal short furrow between the insertions of antennae.

Thorax elongate, as long as abdomen, with a distinct constriction between pro- and mesothorax, and meso- and metathorax respectively, thoracic segments very convex dorsally and almost equal in length; prothorax widest, metathorax a little wider than mesothorax; pronotum with a longitudinal median furrow; mesonotum small and narrow, with the anterior part (scutum) which is followed by a small median pit, and then by the large, oblong and convex scutellum; metathorax almost round; coxae thick and large; intermediate coxae contiguous.

Abdomen smooth and polished, ovate and somewhat acuminate,

ventrally with a few scattered punctures; first abdominal tergite with transverse fold or carina; third tergite widest; pygidium and hypopygium normal.

Length of body	6,5 mm.
„ „ thorax	2,6 „
„ „ abdomen	2,8 „
„ „ antenna	2,0 „
Width of head	1,3 „
Habitat	Japan

Type-locality: Ikeda (near Osaka), Honshû, Japan.

Described from two females collected by Mr. K. Iwata, August 1930, preserved in the Entomological Laboratory, Kyûshû Imperial University, Fukuoka, Japan.

This species comes very near to the European species, *Methoca ichneumonides* LATREILLE. In the former the first abdominal tergite partly a little yellowish brown, while in the latter entirely black.

In conclusion, my hearty thanks are hereby expressed to Prof. TEISÔ ESAKI of Kyûshû Imperial University and Mr. MUNEMOTO YANO of Imperial Forest Experiment Station, Tokyo, who have helped me in various ways in the course of the present work. Thanks are also due to Mr. K. IWATA of Osaka who has kindly sent the material for identification.

附 言

本文に於て記載したる Methocidae ハンメウバチ科(新稱)の一新種は大阪の岩田久二雄氏が同地に於て採集されたものである。生態上よりしても極めて興味ある *Methoca* ハンメウバチ属(新稱)の一種が本邦内地からも見出された事は愉快的な次で、私は本種に和名としてハンメウバチなる名稱を提唱する。

Methoca 属の蜂の生態は ADLERZ (1903, 1906), BOUWMAN (1908, 1909), CHAMPION 兄弟 (1914, 1905), WILLIAMS (1919), PAGDEN (1925), MAIN (1927) 等の諸氏により觀察された。それらの詳細に就ては本文の終りに附した文献を参照して頂き、此處では簡単に御紹介したいと思ふ。

Methoca ichneumonides が *Cicindela* の幼蟲を狩るのを最初に発見した人は Sweden の GOTTFRID ADLERZ (1903) で、その記憶すべき発見地は “on the bank of the Ljungan in Medelpad, Central Sweden” である。それ以來 *Methoca* が *Cicindela* の唯一の外部寄生蜂なる事が多くの人々の注目する處となつた。*M. ichneumonides* が狩る *Cicindela* の種類は次の如きものが知られて居る。

Cicindela sylvatica, *C. campestris*, *C. germanica*,

但し最後の種は確實に觀察されたものでない。1919 年に FRANCIS X. WILLIAMS は Philippines 産の *M. striatella*, 及び *M. punctat.* の生態を報告した。又同氏はこれより先 1916 年に *M. stygi.* の生活史をも調べて居る。それで私の知つて居る範圍では以上四種類の *Methoca* の習性が明かとなつて居るのである。さて *Methoca* の觀察は野外では不便が多いので、硝子器を利用し室内で行つた最初の人ば CHAMPION 兄弟 (1914) で WILLIAMS も PAGDEN もこの方法によつた。歐洲の *M. ichneumonides* の觀察によれば雌は parthenogenesis をなしうるといふ事である。PAGDEN は少くともこれによつて雄の少い事が頷かれると述べた。*Methoca* の雌は *Cicindela* の幼蟲の巢穴に大膽勇敢に、自體よりも極めて大きな、而も強大な大顎を所有し獲物ごさんなれと待ち構へて居る *Cicindela* の幼蟲を正面から攻撃する。彼女の slender な體と長い刺針とはこの攻撃に極めて適應したものであるといふ。刺す場所は外の狩獵蜂と同じである。時には *Methoca* 自身が *Cicindela* の齒にかゝつてゐても尙容易に *Cicindela* を寛醉せしめうる。彼女は *Cicindela* の胸部或は腹部腹面に一個の卵を産附し、*Cicindela* の巢穴をそのまま利用して巢とし入口は砂其他のもので埋めてしまふ。即ち *Methoca* は特別に巢の造營に努力する事なく、一般狩獵蜂の餌物狩り以後の仕事は同様に行ふのである。CHAMPION 兄弟によれば雌が幼蟲を狩つてから後穴の中に 30 分位留つて居り、穴を埋めるのに 30 分から 1 時間位を必要とするといふ。又 1 日に 1 頭の *Methoca* は 3 匹の *Cicindela* の幼蟲を處理するであらうと述べた。雌の平常の食物は不明で絶食期間は 8 日であつた。卵は産附せられてから 5 日乃至 10 日の間に孵化するらしい。其他色々觀察せられて居るが御紹介するに紙面を要する故割愛せねばならない。*M. japonica* に就ては長友岩田氏が調べて居られるから、私はこゝに日本のハンメウバチの生態が遠からず明かにせらるゝ事を望みつゝ擱筆する。

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